ABSTRACT OF THE DISCLOSURE

A label switching router having an internal channel share function over an asynchronous transfer mode that sets up an internal channel in advance of the external channel and shares it when an external channel needs to be set up, and a method for sharing an internal channel using the same. The label switching router includes a forwarding engine for setting up a label switched path by using a signaling protocol, extracting an egress forwarding engine number and a channel identifier, allocating an extension tag, searching a previously-set internal channel, forming a forwarding information base/label information base including the previously-set internal channel identifier and the extension tag, adding a header having the internal channel identifier and extension tag to a received internet protocol packet by referring to the forwarding information base/label information base, and forwarding the internet protocol packet, and a merging unit for receiving label switched path set information from a peer forwarding engine, forming an extension information base/merging table where an internal channel identifier is mapped to an extension tag, performing merging when receiving an internet protocol packet having the extension tag, extracting the extension tag, mapping the extension tag to the internal channel identifier, and forwarding the internet protocol packet to an internal channel having the mapped internal channel identifier.